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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,377	11/15/2001	Klaus Golbig	CELL0018	4460

7590 03/29/2005

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EXAMINER

HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/991,377

Applicant(s)

GOLBIG ET AL.

Examiner

Dwayne K Handy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-16,19-28,31-81,83-87,89-92,94-99 and 111-123 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5-16,19-28,31-47,56-75,111,112,115,116 and 118-122 is/are allowed.
- 6) ☒ Claim(s) 76-81,113,114,117 and 123 is/are rejected.
- 7) ☒ Claim(s) 48-55,83-87,89-92 and 94-99 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 113 and 114 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "a means for enhancing at least one of....a quality of a chemical product that is produced by said stacked plate reactor" in claim 113 is a relative term which renders the claim indefinite. The term "quality of a chemical product" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear to the Examiner what would be needed to meet the limitation of "enhancing the quality of a chemical product" since "quality" is a relative term. For example, enhanced quality with respect to what? The starting products? Known products from a given reaction? What defines an enhanced quality of a chemical product? The term "thereby enhancing the quality of a product that is produced..." is in claim 114 modifying an action of the heat exchanger. This is also unclear.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 76-81, 117 and 123 are rejected under 35 U.S.C. 102(b) as being anticipated by Giddings (4,894,146). Claims 76-81 were previously rejected under Giddings. This rejection remains in effect and also now applies to claims 117 and 123. Please see Response to Arguments below.

Response to Arguments

5. Applicant's arguments and amendment, filed 1/4/2005, have been fully considered and are persuasive. The rejection(s) of claims 1, 3, 7, 13-61 and 94 has been withdrawn. Claims 76-81 remain rejected under Giddings, however. Applicant has amended independent claim 76 to include one bifurcated channel a plurality of openings of different length. Applicant then argues that these added features make claim 76 distinguishable over the prior art. The Examiner respectfully disagrees. Applicant has not added the allowable feature from the dependent claims. Claim 83 requires a bifurcated fluid channel comprised of the opening of the simple plate. Claim 76 merely requires a bifurcated fluid channel in the reactor. The Examiner believes Giddings provides this (element 15C). Also, applicant has added the feature of a

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plurality of different sized openings in one simple plate. This feature is also in new claim 117. This is shown in plate 16 of Giddings. Claim 123 does not add any new feature to that is not contained in Giddings. Therefore, the Examiner believes Giddings still meets the limitations of claims 76-81 as well as new claims 117 and 123.

Allowable Subject Matter

6. Claims 1, 2, 5-16, 19-28, 31-47, 56-75, 111, 112, 115, 116 and 118-122 are allowed. Claims 1 and 13 have been amended to include previously indicated allowable subject matter. Claims 62-75 were indicated as allowable in the previous action.

Claims 48-55, 83-87, 89-92 and 94-99 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKH
March 20, 2005


Jill Warden
Supervisory Patent Examiner
Technology Center 1700